

No. 15-1370, 15-1426

**UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT**

MAG AEROSPACE INDUSTRIES, INC. (NOW KNOWN AS
MAG AEROSPACE INDUSTRIES, LLC),

Plaintiff-Appellant,

v.

B/E AEROSPACE, INC.,

*Defendant-Cross
Appellant.*

Appeal from the United States District Court
for the Central District of California in Case No. 2:13-cv-06089

The Honorable S. James Otero

**RESPONSE AND REPLY BRIEF OF PLAINTIFF-
APPELLANT MAG AEROSPACE INDUSTRIES, LLC**

NON-CONFIDENTIAL

Steven D. Moore
**KILPATRICK TOWNSEND &
STOCKTON LLP**
Two Embarcadero Center, 8th Floor
San Francisco, CA 94111
Telephone: (415) 576-0200

Adam H. Charnes
**KILPATRICK TOWNSEND &
STOCKTON LLP**
1001 West Fourth Street
Winston-Salem, NC 27101
Telephone: (336) 607-7300

*Counsel for Plaintiff-Appellant
MAG Aerospace Industries, LLC*

September 23, 2015

CERTIFICATE OF INTEREST

Counsel for Plaintiff-Appellant certifies the following:

1. The full name of every party represented by me is:
 - MAG Aerospace Industries, Inc. (now known as MAG Aerospace Industries, LLC).
2. The name of the real party in interest is:
 - MAG Aerospace Industries, LLC.
3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the party represented by me are:
 - Zodiac US Corporation, parent of MAG Aerospace Industries, LLC; Zodiac Aerospace S.A., parent corporation of Zodiac US Corporation.
4. The names of all law firms and the partners or associates that appeared for the party now represented by me in the district court or are expected to appear in this court are:
 - Kilpatrick Townsend & Stockton, LLP: Emil Herich, Steven Moore, Candice Decaire, Megan Chung, Kevin Clark, William Mosley, Matthew Holohan, Alyson Wooten, Erwin Cena, Adam Charnes; and
 - Chadwick Law Firm: Cheryl Chadwick.

Dated: September 23, 2015

By: /s/ Steven D. Moore

Steven D. Moore

*Counsel for Plaintiff-Appellant
MAG Aerospace Industries, LLC*

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The material omitted on pages 1, 3-4, 6-8, 12, 14-19, 29-31, 37, 42, 45, and 51-52 includes text from B/E’s technical documents including manuals and customer proposals, discovery responses by B/E, and excerpts from the deposition transcripts of the parties’ experts, Dr. Gregory Chamitoff and Steve Meyers, regarding the configuration, operation, and testing of B/E’s vacuum toilets. The material omitted also includes excerpts from the deposition of Mark Pondelick, a listed inventor of the patents-in-suit and B/E’s Vice President and General Manager in charge of its vacuum toilet division, regarding the terms of his employment with B/E. B/E designated the foregoing information “Highly Confidential – Attorney’s Eyes Only” in the District Court litigation, and therefore, this information is subject to the Protective Order entered in the District Court.

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MAG’S REPLY IN SUPPORT OF ITS APPEAL

I. INTRODUCTION

B/E admits that it historically did not make or sell vacuum toilets for aircraft. Opp., 5. Shortly after B/E decided to enter the aircraft vacuum toilet business in 2007, it hired former MAG employee and inventor of the three patents-in-suit, Mark Pondelick, to lead its design efforts. A9; A1671-A1672. During the development of B/E’s accused toilets, Mr. Pondelick led B/E’s vacuum toilet team, also composed of several other former MAG employees with knowledge of MAG’s vacuum toilet designs. There is no dispute that Mr. Pondelick, now the Vice-President of B/E’s vacuum toilet division, was involved in the design effort, and B/E [REDACTED]

[REDACTED] A11-A12. Relying on the expertise of Mr. Pondelick, B/E designed a vacuum toilet that included multiple line replaceable units (“LRUs”) and could be maintained and serviced “without tools.” A1667; A1670; A1674; A6077. These features are claimed by the patents-in-suit and, as B/E’s documents expressly acknowledge, are present in B/E’s vacuum toilets.

Despite this evidence of infringement, B/E now charges MAG with improperly “resort[ing] to litigation.” Opp., 5. B/E’s disparaging and unsupported accusations are an attempt to deflect attention from evidence—including multiple internal B/E documents, testimony of B/E’s own witnesses, and expert analyses of

B/E's infringement—that the District Court ignored in granting B/E's summary judgment motion of noninfringement. B/E's effort merely highlights that substantial disputed issues of material fact exist regarding infringement and that trial by jury is required. Therefore, the District Court's judgment in favor of B/E should be reversed.

II. ISSUES OF MATERIAL FACT PRECLUDE SUMMARY JUDGMENT OF NONINFRINGEMENT OF THE '054 PATENT

There are genuine issues of material fact about whether B/E's toilets can be maintained and serviced “toollessly,” as required by the '054 Patent claims. Contrary to B/E's arguments, (a) B/E's use of the phrase “without tools” to describe its toilets in at least twenty-nine (29) different B/E technical and sales documents cannot simply be dismissed as a “typographical error”; (b) one of ordinary skill in the art would not have considered a coin to be a tool in this context and issues of fact exist on this question; (c) the District Court never held that a coin would be considered a tool under its claim construction of “toollessly,” but instead explicitly declined to make that finding; and (d) in any event, there are issues of fact about whether the B/E toilet bowl can be manually removed (*i.e.*, removed using only one's hands).

A. B/E's Own Documents Unambiguously and Repeatedly State that B/E's Toilets Are Toollessly Maintained and Serviced.

The '054 Patent requires that the waste receptacle (*i.e.*, toilet bowl) is “toollessly inserted into and removed from the installed position independent of the frame.” A149, 4:65-67. To sell its toilets, B/E presented multiple technical and sales documents to its customers stating that its toilets can be maintained and serviced “*without tools*.” For example, [REDACTED]

[REDACTED]

[REDACTED] A3080-A3081; A6077 (emphasis added).

[REDACTED]

A3681, A6077. This “without tools” language, which [REDACTED]

[REDACTED] appears in no fewer than **twenty-nine (29)** technical and sales documents that B/E created and distributed to actual or prospective customers. Opening Br., 9; A3181-A3182, ¶ 3; A6009; A6016; A7687. These documents are not, as B/E now suggests, “only” marketing docs, but include White Papers, Technical Description documents, Proposals for Sale, and a Preliminary Technical Proposal. A3181-A3182, ¶ 3; A6016; A6018; A6077. These documents were widely disseminated to different

customers [REDACTED] *Id.* These documents alone—which B/E admits authoring and sending—create an issue of material fact.

B. B/E’s Post-Complaint “Typographical Errors” Argument Shows that There Is a Genuine Issue of Material Fact.

B/E’s post-litigation contention that its repeated statement of “without tools” in its own documents was merely a “typographical error” does not eliminate issues of fact, as B/E contends, but instead confirms that there are genuine disputes of material fact. The jury should decide which is accurate, B/E’s recurring representation to its customers that its product could be disassembled without tools, or B/E’s litigation-inspired “typographical error” argument. The fact that later B/E documents (many issued after this litigation commenced in 2013) use alternative language only underscores the genuine dispute of material fact.

The case law B/E cites is inapposite because the facts of those cases are distinguishable. Each of the cases on which B/E relies involved an obvious and isolated “typographical” mistake, which was apparent from the document’s surrounding language and other contemporaneous evidence. Here, however, the alleged “typographical” error is not merely an error in spelling or wording, but rather an unequivocal statement that B/E repeated many times over many years, in many different contexts and is only now attempting to disclaim. A3181-A3182, ¶ 3; A6018; A6077. Moreover, unlike the cases B/E cites, B/E’s “without tools”

statements are consistent with the remaining text of the B/E documents in which they appear, including the surrounding language reproduced above concerning the ease of removing and replacing B/E's toilet bowl, as well as other evidence outlined in MAG's Opening Brief and below.

For example, B/E cites *Oto v. Metropolitan Life Insurance Co.*, which involved a written expert declaration concluding that the documents at issue were forged with a single statement that "the person who signed the 12 known signatures **"is"** [rather than "is not"] the same person who signed the change of beneficiary form at issue in this case." 224 F.3d 601, 605 (7th Cir. 2000) (emphasis in original). This error was corrected by adding the word "not" in an errata sheet, which put the expert's "testimony back in line with her previously disclosed opinion." *Id.* The court found that this *one* misstatement, which was demonstrably inconsistent with the previously disclosed opinion and was corrected by the errata sheet, was insufficient to preclude summary judgment, in the absence of any evidence suggesting that it was not a mistake.

Jordan v. Columbia County Board of Education involved a Settlement Agreement where a *single* reference in error to a "GAE-1" policy applying to the employee instead of a "GSK" policy was not sufficient to raise a material fact about the employee's employment type. 492 Fed. App'x 956, 958-59 (11th Cir. 2012). The "typographical error" was supported by the document itself and other

undisputed evidence, such as an affidavit and company policy regarding the classification of the position. *Id.* at 959. Similarly, a *single* error in recording information in a contract, which was shown to be an undisputed error by the surrounding contract language and supporting records, was the issue before the court in the *Daub* and *Prusman* cases. *Daub v. Eagle Test Sys., Inc.*, No. C-05-01055 RMW, 2006 WL 3782877, at *3 n.4 (N.D. Cal. Dec. 21, 2006) (error in payment date recorded in contract did not create a genuine issue of material fact); *M. Prusman Ltd. v. M/W Nathanel*, 684 F. Supp. 372, 374 (S.D.N.Y. 1988) (error in recording number of cartons as 219 rather than 119 in surveyor report did not raise a material issue of fact).

What B/E attempts to characterize as a “misprint” is not a single error inconsistent with surrounding language and other reliable, contemporaneous evidence. Here, the “without tools” language is found in numerous B/E documents and is consistent not only with the content of those documents, but also with other B/E documents and testimony. Moreover, B/E has never attempted to correct it.

Multiple B/E documents of many different types explicitly state that the B/E toilet—and particularly its bowl—can be repaired without tools. These documents are internally consistent and clearly understood to describe repairs performed without tools. For example, in [REDACTED], [REDACTED], quoted *supra*, there is no basis in that document from which

to conclude the statement “the toilet is designed to be dis-assembled, assembled, maintained, and serviced without tools” is clear error. Indeed, the very language surrounding the statement demands a different conclusion. The preceding two bullet points [REDACTED] A3681.

The sentence following the “without tools” statement describes [REDACTED]
[REDACTED] *Id.* It does not undisputedly follow that the “without tools” statement is a typographical error.

B/E does not and cannot point to any evidence that it attempted to inform its customers about or otherwise to correct its so-called “typographical error.” Indeed, the evidence shows that B/E did not identify this language as a “typographical error” until this litigation. A1702; A3149-A3150.

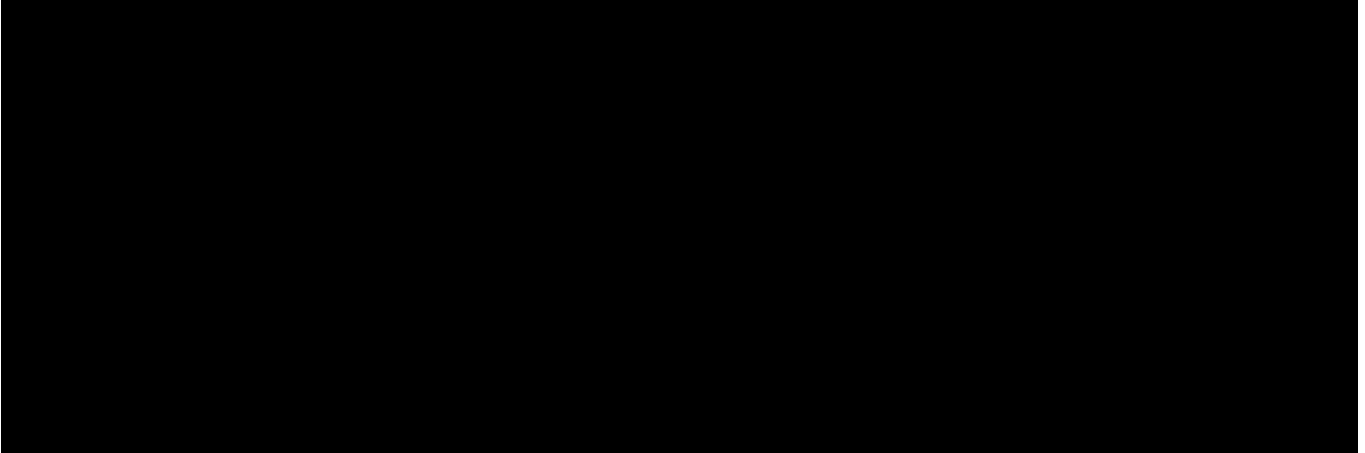
B/E’s own repeated representations that its toilets can be repaired without tools created an issue of fact that is sufficient to preclude summary judgment of noninfringement of the ’054 Patent.

C. The B/E Toilet Bowl Can Be Removed Toollessly Because It Can Be Inserted and Removed with a Coin, and There Are Genuine Disputes of Material Fact as to Whether a Coin Is a Tool.

B/E admits that its toilet bowl—which it repeatedly told customers could be serviced “without tools”—can be removed and inserted with nothing more than a coin. Opp., 16, 19. B/E demonstrated that the quarter-turn fasteners holding its toilet bowl in place could be removed with a quarter, for example, [REDACTED]

[REDACTED] Opening Br., 24; A3185, ¶ 24, A5686-A5687.

MAG's expert, Mr. Meyers also verified that a coin easily inserts into the quarter-turn fasteners for the toilet bowl:



A5998.

B/E also distributed to its customers a Component Maintenance Manual (“CMM”), instructing customers to use “a coin” to remove the quarter-turn fasteners. A3183, ¶ 9.

There is substantial evidence from both MAG and B/E witnesses that a coin is not considered a “tool” in the vacuum toilet or aviation industry. Opening Br., 17-24. For example, B/E's General Manager and Vice President and inventor of the patents-in-suit, Mark Pondelick, conceded that he never heard others in the aviation industry refer to a coin as a tool. A3183, ¶ 12. Dr. Chamitoff, B/E's technical expert, acknowledged that, before this litigation, he could not recall any examples of a coin being referred to as a tool. A3184, ¶ 14. *See also id.* ¶¶ 13-16.

MAG's expert and aviation-industry veteran, Steve Meyers, similarly never heard of a coin used as a tool. Opening Br., 23. Even B/E's former director of Sales and Marketing, Paul Neary, indicated that he did not consider a coin to be a tool; when asked if he removed the bowl "without using tools," he described his use of a quarter, euro, and Brazilian real to do so. Opp., 27.

In light of B/E's multiple admissions that its toilet bowl can be removed and replaced "without tools" and with a coin, and abundant evidence that those in the vacuum waste system industry and the parties' experts do not consider a coin to be a tool in this industry, there is, at minimum, a factual dispute about whether B/E's toilet bowls are "toollessly" inserted and removed as required by the '054 Patent.

D. Whether a Coin Is a Tool Is Not a Matter of Law, and Should Be Allowed to Go to the Finder of Fact.

B/E is mistaken that the District Court resolved the issue of whether a coin would have been considered to be a tool within the meaning of claim 1 of the '054 Patent during claim construction. Opening Br., 19-25. In fact, B/E never argued at any time during the claim construction phase that a coin is a tool or that "toollessly" really meant only using one's hands and not any other object. A957-A960. When MAG itself asked the District Court to adopt a construction that would have foreclosed B/E's argument that a coin is a tool as a matter of law (highlighting this eventual dispute), the court explicitly declined to rule on this

exact issue, holding only that “toollessly” meant “without the use of any tools,” but not deciding whether a coin was a “tool” under its construction:

[MAG Counsel] Mr. Moore: [T]he reason that we have our construction of adding conventional and mechanics tools is because we’re trying to avoid a dispute down the road. Frankly, we agree that “toollessly” means “without tools.” But I don’t think that’s going to answer the question ultimately.

...

The Court: Okay. “Toollessly” means any tool?

Mr. Moore: Yes. But here’s where the issue is, in that the dispute on their toilet will be whether something like a coin that could be used to turn a connector is a tool. I think B/E really wants this term to mean anything other than your hand. ...

...

Mr. Moore: ... Their own manual says that you can do this without tools, and you can use a coin. And so what I’m trying to do is avoid disputes six months from now - -

The Court: I’m here to resolve disputes, so we’ll have to resolve it as best as we can and move it to a jury as quickly as you can get it. That’s the goal.

A1211-A1212, at 89:4-90:3; A1215-A1216, at 93:23-94:7. The District Court’s claim construction order adopted B/E’s construction—“without the use of any tools”—but never analyzed the meaning of the term “tool” within its construction,

nor held that a coin was not a tool. A38-A41. There was good reason for this—B/E never argued that “toollessly” meant only using one’s hand or otherwise to construe a coin as a tool. A957-A960.

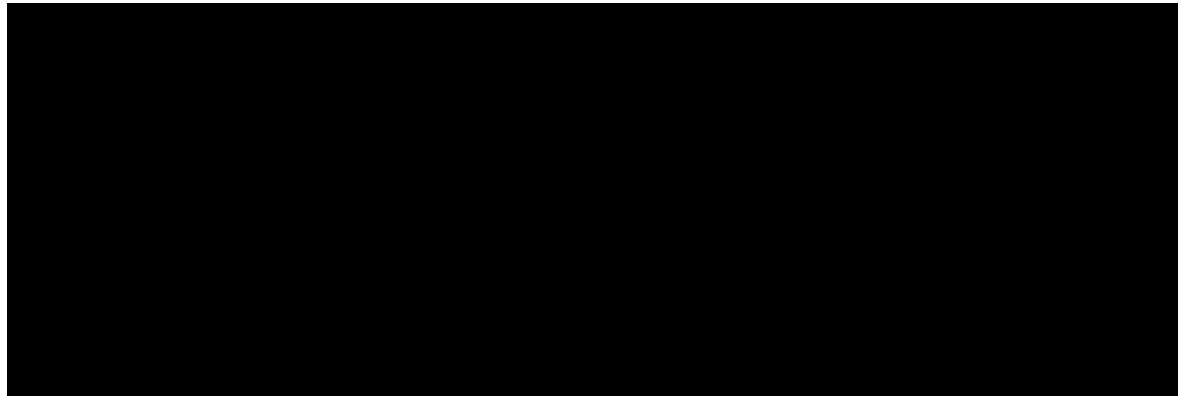
But at summary judgment, B/E argued as if the issue had been squarely raised and decided in its favor. The District Court acknowledged the “inherent ambiguity” in its construction of the word “toollessly” (A16), but erroneously held that it issued a prior ruling on this question. However, since B/E failed to argue and the District Court expressly declined to rule during claim construction whether a coin was a “tool” under the ’054 Patent claims, this issue was not decided by the District Court, and is not an issue of law. Rather, whether a coin is a tool is a disputed, material factual issue, unresolved by what the District Court itself observed as the “inherent ambiguity” in its own claim construction and the parties’ conflicting evidence. B/E’s unsupported attorney argument that “[w]hen a coin is used as an implement to replace a screwdriver—an admitted tool—the coin itself is a tool” (Opp., 33) does not resolve this factual issue, as to which the evidence is in sharp dispute as noted above.

B/E’s further protestation that “[a] jury trial in federal court is not needed to determine that when a coin is used instead of a screwdriver to turn screws, the


coin—like the screwdriver—is a tool”¹ Opp., 29-30, is simply wrong. Whether the bowl in B/E’s accused toilets can be “toollessly” inserted and removed—as B/E repeatedly told customers it could—determines infringement. Whether insertion and removal of the B/E toilet bowl with a coin would have been considered in this industry to be “toolless” is thus the key factual question. Where material facts are disputed, they must go to the finder of fact, and MAG presented ample evidence to dispute the issue.

E. Whether B/E’s Toilet Can Be Repaired Manually (Using Hands Only) Is a Further Disputed Material Fact.

B/E’s toilet bowl assembly is connected to the support structure with quarter-turn fasteners. A5906, ¶102. B/E now uses the phrase “screw fasteners,” but it is not disputed that these oversized plastic quarter-turn fasteners can be removed without a screwdriver.



A5998.

¹ B/E inaccurately describes what its toilet uses as “screws.” In reality, they are  not the level of effort needed to insert or remove a conventional screw.

B/E's own Paul Neary testified that these fasteners could "definitely" be removed "with your hands." A3184-3185, ¶¶ 17, 18, 20; Opening Br., 18 (stating that replacing the toilet bowl "didn't require a . . . coin or anything").

B/E criticizes MAG's expert, Mr. Meyers, for not demonstrating this fact himself. However, B/E admits that when Mr. Meyers attempted to demonstrate this "quick release turn" using his hands during a formal inspection of the B/E toilet bowl, B/E's counsel yelled "stop," and refused to allow Mr. Meyers an opportunity to attempt the "quick release turn . . . with your hand" to which Mr. Neary had testified. A3196-A3197, ¶ 70; A6024, ¶ 3.244. Having prevented MAG from obtaining direct evidence that the toilet bowl can be removed with nothing more than one's hands, B/E should not now be permitted to obtain summary judgment by attempting to distance itself from its own employee's testimony and arguing that MAG has no contrary evidence.

In sum, all of the evidence cited above is more than sufficient to raise a genuine issue of material fact, and the District Court erred in granting summary judgment of noninfringement of the '054 Patent.

III. ISSUES OF MATERIAL FACT PRECLUDE SUMMARY JUDGMENT OF NONINFRINGEMENT OF THE '055 PATENT

A. There Are Genuine Disputes of Material Fact about Whether B/E's Valve Set Is a Line Replaceable Unit.

As further discussed in Section III.B, *infra*, the District Court found that B/E's documents, training videos, and toilets, in addition to the analysis of MAG's expert, Mr. Meyers, created genuine issues of material fact about whether the B/E flush (*i.e.*, discharge) valve and Integrated System Controller ("ISC") (*i.e.*, flush control unit) form a "valve set," as claimed in U.S. Patent No. 6,536,055 (the "'055 Patent"). A23. This same evidence creates genuine issues of material fact from which a jury could reasonably find that B/E's valve set is a "single module targeted for easy replacement in the field" and is therefore an LRU.

B/E points to how it has chosen to describe its valve set, including parts lists, part numbers, and descriptions in post-litigation manuals, to argue that because it does not label its valve set as an LRU with a single part number, the valve set is not an LRU. Opp., 41. As discussed below, however, B/E's self-serving descriptions of its valve set do not resolve issues of fact about whether the valve set is an LRU, especially where other B/E pre-litigation representations and MAG's expert analysis support that the valve set is in fact an LRU.

B/E also argues that its valve set is not an LRU [REDACTED]

[REDACTED] or allegedly because there is no evidence

that a customer has actually removed and replaced the valve set in the field.

Opp., 37. Whether [REDACTED]

[REDACTED]. Likewise, whether the valve set has actually been removed and replaced in the field is immaterial, because the District Court's construction of LRU does not require actual removal and replacement of the valve set LRU. Thus, B/E's additional arguments are irrelevant and do not eliminate genuine issues of material fact.

1. B/E's Documents, Part Numbers, and Manuals Do Not Resolve Factual Disputes about Whether Its Valve Set Is an LRU.

B/E makes much of the fact that its internal documents do not explicitly describe its valve set as an "LRU" but do characterize the toilet bowl as an "LRU." A2054. There is no requirement, however, that an accused infringer's own internal documents explicitly admit the presence of every claim element. If there were such a requirement, infringement would be impossible to prove in nearly every case. Therefore, the fact that B/E's internal documents expressly admit the presence of some, but not all, claim elements is not dispositive. Rather, the question is whether B/E's toilet satisfies the claim requirements.

This question is not, as B/E would have it, answered by B/E's choosing to use separate part numbers for its flush valve and ISC, or to list these components

as separate line items in its parts catalog. Other B/E documents such as customer proposals demonstrate that B/E designed (and presented) its ISC and flush valve as a single module capable of being easily replaced in the field regardless of whether these components have different part numbers. In [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] A6024, ¶ 3.142.

Likewise, whether the flush valve and ISC form an LRU is not resolved by B/E's manuals. B/E contends, based on language in a CMM created in November 2013, three months after litigation commenced, A2641-A2642, ¶ 323, that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] A3093. B/E documents created before this litigation, however, reveal [REDACTED]

[REDACTED]

[REDACTED] A3092-A3093; A3772. Further, MAG's expert, Steve Meyers, explained how his in-person inspection of B/E's toilets confirmed that they included a valve set forming an LRU. A6022-A6026; A6059-A6066. Here, again, B/E's post-litigation direction to remove the flush valve and ISC "separately" (which conflicts with its previous representations to customers that the flush valve and ISC could be quickly removed as a single module) does not remove genuine issues of fact, but rather creates them.

2. Neither Removal of Other Components Nor Actual Removal and Replacement of the Valve Set Are Relevant to Whether B/E's Valve Set Is an LRU.

Whether removal of B/E's valve set may also require removal of other components such as the toilet bowl is irrelevant to whether B/E's valve set is an LRU. The '055 Patent itself explains that the valve set may be removed with other components. A250, 9:40-43 ("[T]he valve set 8 is removed with the transfer pipe 44, outlet pipe 12, discharge pipe 21, and second rinse pipe 35b."). Thus, B/E's

contention that other components of B/E's toilet might have to be removed before removing its valve set has no bearing on whether B/E's valve set is an LRU, and certainly does not resolve factual disputes for this issue.

Similarly, B/E's unsupported contention that [REDACTED] [REDACTED] to remove the flush valve and ISC has nothing to do with whether the valve set is an LRU.² Claim 15 of the '055 Patent requires that a "second line replaceable unit" consisting of "at least two of the discharge [*i.e.*, flush] valve, rinse fluid valve, and flush control unit [which] are provided as a valve set" and then describes two methods by which the first LRU or the second LRU may be removed and replaced. A251, 11:34-39. Neither the listing of components that may comprise the valve set nor the methods by which the claimed LRUs can be replaced affects the District Court's claim construction of LRU, a "single module targeted for easy replacement in the field."

Finally, and contrary to B/E's contentions, whether there are issues of material fact does not turn on evidence that any of B/E's customers *actually*

² In any event, it [REDACTED]

removed and replaced the B/E valve set as a single module in the field. An LRU is a “single module *targeted* for easy replacement in the field.” A37 (emphasis added). B/E’s flush valve and ISC are designed as a single module that can be easily removed and replaced in the field. A6059-A6066. B/E designed this module to be easily replaced in the field by [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] This evidence shows that B/E designed its valve set for easy replacement in the field and therefore, that its valve set is an LRU under the District Court’s claim construction.

Because there is more than sufficient evidence on the basis of which a reasonable jury could find that B/E’s valve set is an LRU, summary judgment of noninfringement should be reversed.

B. There Are Genuine Disputes of Material Fact about Whether B/E's Discharge Valve and Flush Control Unit Form a "Valve Set."

The District Court's conclusion that there is a triable issue of fact about whether B/E's vacuum toilets include a "valve set" in the first place is supported by B/E's own documents showing that the ISC is mounted to the flush valve and that the two components are treated as a single module for removal and replacement purposes. *See* Section III.A.1, *supra* (citing evidence). B/E's arguments to the contrary are undercut by its own documents and by the claim language, specification, and prosecution history of the '055 Patent.

In trying to explain why its vacuum toilets do not include a valve set, B/E relies on the doctrine of prosecution disclaimer to contend that the applicants "explicitly distinguished the unitary valve set structure of the alleged invention from a configuration in which the components are 'separately and independently mounted.'" Opp., 41. As the District Court correctly determined, however, the prior art "configuration" that the applicants distinguished was a vacuum toilet (U.S. Patent No. 5,271,105 ("Tyler")) in which the subject components—the discharge valve, flush control unit, and/or rinse valve assembly—were "mounted to a very different part of the toilet." A22. In contrast to Tyler, the District Court correctly held that the applicants did not unequivocally disavow a valve set in which all of the valve set components "are attached to a single, removable piece,"

just like B/E's toilet "where all the valve set components are attached to a single, removable piece." A23.

The District Court thus correctly determined, on the basis of the intrinsic and extrinsic evidence discussed immediately above and in its Order, that there are genuine disputes of material fact about whether the B/E toilet ISC and flush valve form a "valve set," given that the "ISC is mounted to the flush valve" and the ISC and flush valve are designed for easy replacement together in the field as a single component. A23. The District Court's finding that there are triable issues of material fact regarding the "valve set" claim element should therefore be affirmed.

C. There Are Genuine Disputes of Material Fact about Whether B/E or Its Customers Practice the Asserted Method.

B/E alternatively argues that summary judgment of noninfringement of the '055 Patent was appropriate because "MAG has not introduced evidence that the claimed method has been performed on an aircraft (*i.e.*, 'in the field')." Opp., 43. As the District Court held, however, MAG established a genuine dispute of material fact about whether B/E and/or its customers have performed the asserted methods of the '055 Patent. A24. B/E's arguments to the contrary are premised on an incorrect reading of claim 15, as explained below.

1. Claim 15 Does Not Require Replacing the Valve Set LRU.

B/E asserts that method claim 15 requires evidence of the actual removal and replacement of the valve set LRU (in the claim, the "second line replaceable

unit”). Opp., 45-46. But claim 15 expressly requires replacing *either* the first LRU (toilet bowl) “*or*” the second LRU (valve set). A251, 11:34-39. B/E incorrectly reads out the claim element “or” to assert that replacement of the valve set is required to practice the claim.

Claim 15 may alternatively be infringed by replacement of the “first line replaceable unit” (toilet bowl). As the District Court correctly recognized (and B/E does not dispute), “[MAG] had provided evidence that [B/E] has replaced vacuum toilet bowls at least a dozen times.” A24. The District Court also correctly noted that there was sufficient evidence to demonstrate performance of the method by at least one of B/E’s customers, stating, “a reasonable jury could find that United’s replacement of a toilet bowl took place within the United States,” and that “Defendant (B/E) instructed United regarding toilet bowl replacement.” *Id.*; A6066-A6067. For these reasons, the District Court properly determined that there was sufficient evidence of direct and indirect infringement by B/E and its customers.

2. Claim 15 Does Not Require that the Method Be Performed on a Vehicle.

B/E further misreads claim 15 to require that the method must be performed on a vehicle (aircraft). The District Court’s construction of LRU, which neither party disputes on appeal, merely requires an LRU to be “*targeted* for easy

replacement in the field.”³ Nothing in claim 15 requires the recited method to be performed in the field, so long as a claimed LRU exists and is replaced in performing the method. As the District Court correctly held, “so long as the module is *targeted* for easy replacement in the field,” the exact location of performance of the method is immaterial. A24 (emphasis in original).

B/E attempts to require performance of the method on aircraft by pointing to the term “line replaceable unit” in the claim, “the understood definition of what a line-replaceable unit is,” and the additional claim term, “in fluid communication.” Opp., 44. However, an LRU does not cease to be an LRU simply because it is replaced in a repair shop. A24; A6065-A6066. It is an LRU because it was *targeted* (*i.e.*, designed) to be an LRU and has the potential to be easily replaced in the field, regardless of whether it is actually replaced in the field.

The claim words, “in fluid communication,” also do not require that the claim 15 method be performed on aircraft. “In fluid communication” merely describes the fact that the toilet components (*i.e.*, waste receptacle, discharge valve, and rinse fluid valve) transport fluids and/or waste when the toilet assembly is in operation. Common sense dictates, moreover, that these toilet component LRUs, individually or combined as a valve set, would not be replaced while the toilet is actively connected to a sewer line or source of rinse fluid. In any event,

³ The District Court adopted B/E’s construction for LRU. A34-A37; A41.

B/E never argued during claim construction that this language required performance of the method on aircraft. A967-A970. It is now too late for B/E to raise this argument.

Lastly, B/E improperly cites the claim construction of LRU by the Patent Trial and Appeal Board (“PTAB”) in parallel *inter partes* review proceedings to argue that the method of claim 15 must take place in the field. As the Court has recently explained, the PTAB and District Courts use different standards for claim construction, and therefore the PTAB’s construction is irrelevant. *See In re Cuozzo Speed Techs., LLC*, 793 F.3d 1268, 1279 (Fed. Cir. 2015). Further, the District Court has already defined LRU and neither party appeals this construction. It is thus not appropriate to consider the PTAB’s understanding of LRU, given that a different standard applies to those proceedings.

Thus, B/E’s incorrect arguments about how and where the patented method is performed do not justify the order granting summary judgment of noninfringement. Rather, for the reasons set forth above, that order should be reversed.

**IV. ISSUES OF MATERIAL FACT PRECLUDE SUMMARY
JUDGMENT OF NONINFRINGEMENT OF THE '942 PATENT**

A. The District Court's Construction of the "Flange" Limitation Is Not Limited as B/E Contends.

The District Court defined "out-turned flange supported by the top of the support structure" (the "Flange Limitation") as "outside rim or edge turned away from the sidewall, transferring loads to the top of the support structure." A28-A34. The relevant question for infringement of U.S. Patent No. 6,353,942 (the "'942 Patent") is thus whether the B/E toilets have such an "outside rim or edge." As discussed below, there are genuine disputes of material fact about whether B/E's toilets have such a feature.

B/E argues that the District Court's construction excludes from the claim scope "ribs" or any part of a "rib," and because its toilets purportedly use "ribs" (a characterization it never made before this litigation), they cannot possibly include a "flange." However, the District Court's construction of the Flange Limitation does not explicitly hold that MAG disavowed a "rim or edge" that is part of a so-called "rib" and that otherwise fulfills the requirement of the claims. Rather, MAG's reliance on the two edges (lower and upper) raises issues of material fact as to whether the Flange Limitation is present.⁴

⁴ B/E devotes much of its argument to the standard articulated in *Teva Pharmaceuticals USA, Inc. v. Sandoz, Inc.*, 135 S. Ct. 831 (2015), which is not applicable here. MAG is not appealing the "outside rim or edge turned away from

1. B/E's Unsupported Contention that Its Toilet Includes "Ribs" Does Not Dictate Whether Its Toilet Includes the Claimed Flange.

Contrary to B/E's argument, the District Court's construction of the Flange Limitation does not exclude a "rim or edge" that may also be part of a different structure, such as the vertical column structures that B/E calls "ribs." Indeed, a "rim or edge" is necessarily part of another structure.

Moreover, B/E does not articulate why a "rib," however defined, cannot include a "rim or edge." B/E makes the unsupported argument that neither of the load-transferring edges to which MAG points is an "edge" because each is a "rib" or a "groove" in a "rib." Opp., 57-58. In other words, B/E contends that because the edges at issue are part of what it calls a "rib" structure, they do not meet the Flange Limitation. This overly semantical argument does not square with the evidence.

As MAG explained in its Opening Brief, the alleged "ribs" that B/E describes are vertical columns on the sidewall of B/E's toilet bowl. Opening Br., 45. The bottom edge of these columns is a "first" (lower) edge turned away from the sidewall that transfers loads from the toilet bowl to the top of the support structure. Further, a cut-out within these columns has a distinct "second" (upper)

the sidewall, transferring loads to the top of the support structure" construction by the District Court. Rather, MAG is appealing the District Court's summary judgment finding that because B/E's toilet has what B/E has called in this litigation "ribs," it does not include an "out-turned flange." Opening Br., 26.

edge that contacts and transfers load to tabs at the very highest point of the B/E toilet support structure. *Id.* B/E did not, and cannot, point to anything in the intrinsic evidence of the '942 Patent that disavows flanges that are edges of vertical columns—and again, the District Court’s claim construction does not exclude an “edge” that is the outside limit of such a structure, however it may be denominated. A34.

B/E’s repeated characterization of its toilet bowl structure as being supported by “ribs” thus does not resolve issues of fact about whether the B/E toilet meets the Flange Limitation. As explained below, there are genuine disputes of material fact about whether the bottom (first edge) or the cut-out (second edge) of these so-called “ribs” is an “outside rim or edge turned away from the sidewall, transferring loads to the top of the support structure.”

2. B/E’s Further Attempts to Limit the Scope of the Flange Limitation Were Previously Rejected and Are Misplaced.

B/E attempts to further evade MAG’s evidence of infringement by limiting the scope of the Flange Limitation, in terms of location and shape, by: (a) reviving claim construction arguments that the District Court rejected that are not the subject of this Appeal, and (b) subscribing to the District Court’s erroneous application of its “rim or edge” construction to require a “flat horizontal piece sticking out.” Opening Br., 47-48. In fact, as the District Court correctly found during claim construction proceedings, the Flange Limitation does not require a

specific shape or location for the flange structure, other than that it must be “out-turned” from the toilet bowl sidewall and must transfer loads to the top of the support structure. A31, A33.

B/E argued during claim construction below that the “out-turned flange” must be restricted to a “rim,” the uppermost location of the waste receptacle (*i.e.*, toilet bowl) in Figure 1A of the ’942 Patent. A963. The District Court correctly held that “[b]ecause the specification [of the ’942 Patent] does not disclaim a bowl with a flange elsewhere on the rim, restricting the location of the flange to the upper edge of the sidewall [of the toilet bowl] would unnecessarily import a limitation from the specification into the claims.” A31. B/E similarly argued during claim construction that the shape of the flange should be restricted to a specific “rim” shape in accordance with an embodiment in the ’942 Patent. A963-A965. The District Court again rejected B/E’s effort to limit the shape of “out-turned flange,” and agreed instead with MAG that an “out-turned flange” should encompass an “edge.” A34; A41.

The District Court also explicitly rejected the same prosecution disclaimer argument that B/E now makes with respect to Tyler, finding that “Tyler does not include any flanges for support (see Tyler Patent fig. 1), so it is the *presence of a flange—and not the specific location or configuration of that flange*—that

differentiates the Tyler Patent from the '942 Patent.”⁵ A31 (emphasis added). Thus, in construing the Flange Limitation, the District Court correctly rejected B/E’s attempts to limit the location and shape of the “out-turned flange” to specific embodiments.

For the foregoing reasons, the text of the '942 Patent does not restrict the claimed “out-turned flange” element in the manner argued by B/E.

B. There Are Genuine Issues of Material Fact about Whether B/E’s “Second” (Upper) Edge Meets the Flange Limitation.

B/E contends that it cannot reasonably be disputed that the “second” (upper) edge of the structures on the sides of its toilet bowls is not an “out-turned flange,” as claimed by the '942 Patent. B/E does not cite undisputed facts, nor does it squarely address MAG’s evidence. Instead, B/E relies on attorney argument that “ribs are not flanges,” asserting that it [REDACTED]

[REDACTED]

[REDACTED] Opp., 12. As this Court recently opined, however, “self-serving testimony” from an accused infringer’s witnesses “about the purported goal of its product design does not negate the evidence in the record”

⁵ The District Court further rejected B/E’s argument that amendments to claim language of the '942 Patent in view of Tyler required the waste receptacle to be load-bearing, finding that “the examiner did not add language limiting the bowl to a non-load-bearing bowl,” and that the prosecution history “does not speak to the parties’ disputes about the location or the configuration of that flange or the capability of the waste receptacle to bear loads.” A31.

and is insufficient to sustain summary judgment of non-infringement where “contrary evidence and testimony” exists. *Ethicon Endo-Surgery, Inc. v. Covidien, Inc.*, 796 F.3d 1312, 1325 (Fed. Cir. 2015).

B/E does not and cannot dispute that: (a) the “second” (upper) edge touches the top of the support structure, and (b) load transfer takes place at this juncture. B/E’s own expert, Dr. Chamitoff, [REDACTED]

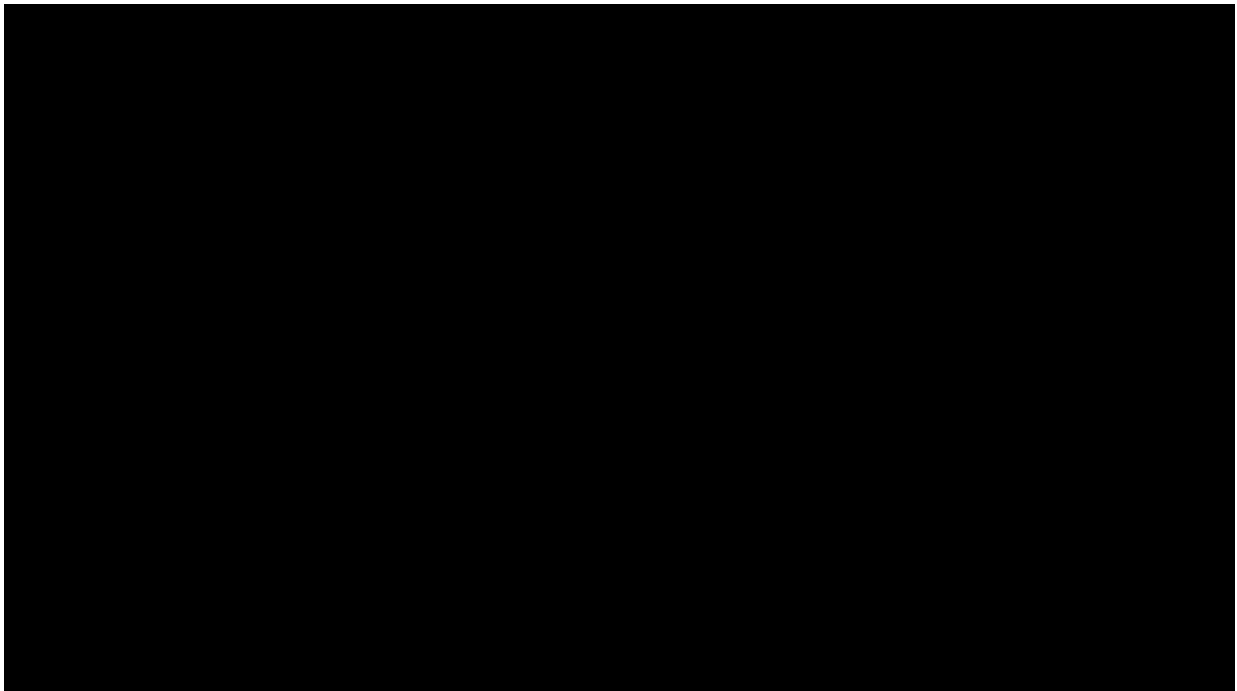
[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]



B/E's expert Dr. Chamitoff further explained [REDACTED]



[REDACTED] A5298, at 179:2-5.

MAG's expert Mr. Meyers also confirmed [REDACTED]



Rather than answer this evidence, B/E's argument is that this load-transferring edge cannot meet the Flange Limitation because it is part of what B/E self-servingly terms a "rib." But the District Court never restricted the "rim or edge" that its construction of the Flange Limitation required as "a rim or edge, other than a rim or edge that is part of a rib." A34. Nor did the District Court find

any disclaimer or disavowal by MAG of any rim or edge of a so-called rib. Rather, B/E is playing a semantical shell game—contending that, even though this second (upper) edge undisputedly is turned away from the sidewall and transfers load to the top of the support structure, it cannot infringe simply because it is part of a “rib” which the District Court held is not a flange. But B/E’s double negative does not answer the question of infringement under the Flange Limitation, nor eliminate the genuine issues of material fact created in part by its own expert’s testimony about the second (upper) edge.

Put simply, something in the B/E toilet must transfer load from the bowl to the support structure—otherwise, the bowl would not be supported. MAG’s evidence is that at least the second (upper) edge of B/E’s vertical columns does so. Thus, the District Court’s order granting summary judgment of noninfringement should be reversed.

C. There Are Genuine Issues of Material Fact Whether the “First (Lower) Edge” of B/E’s Toilet Bowl Practices the Flange Limitation.

B/E contends that the “first” (lower) edge—at the bottom of the vertical columns that B/E calls “ribs”—does not fall within the Flange Limitation because it purportedly does not rest on the very highest point of the support structure.⁶ B/E’s argument is twofold. First, B/E asserts that the District Court appropriately

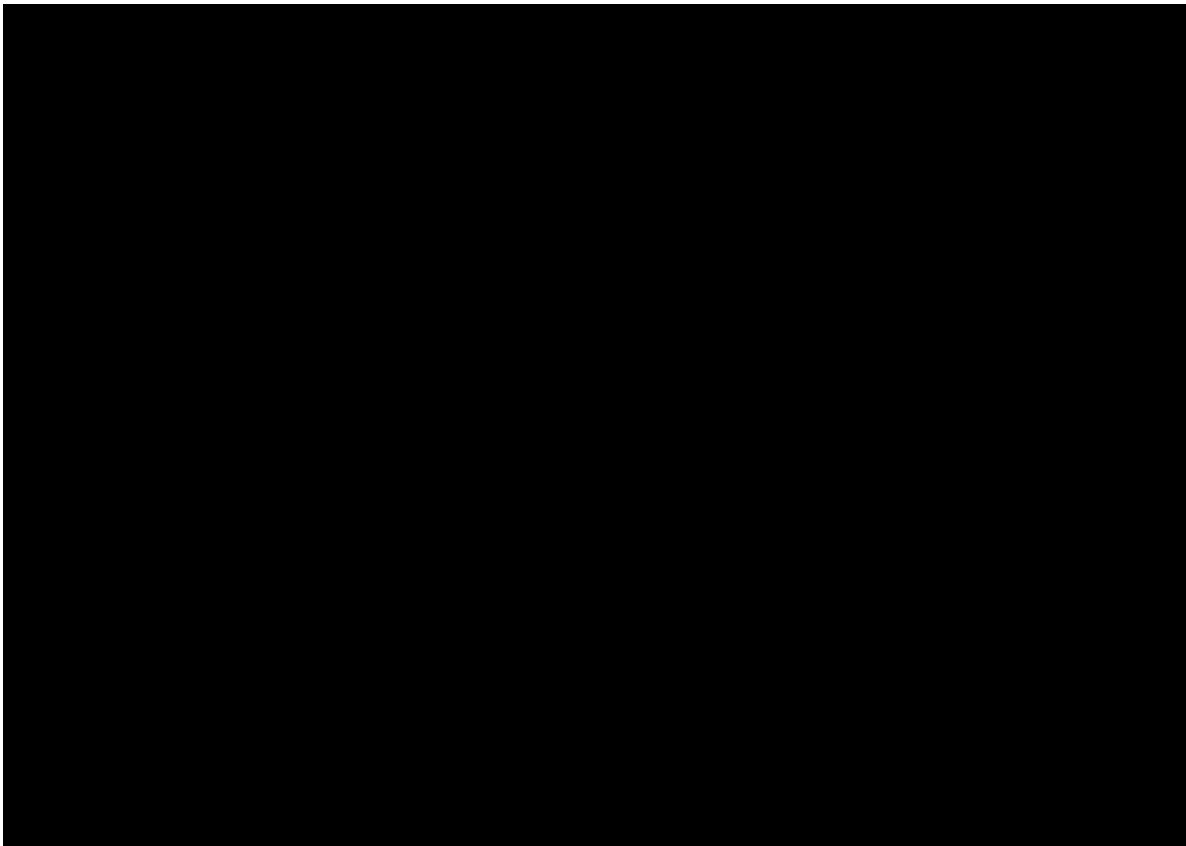
⁶ The very highest point is where the point at which the “second” (upper) edge contacts the side support structure. *See, e.g., Opp.*, 57.

understood the “top of the support structure” to be limited to the very highest point of the side support structure (even though this concept was not briefed, even by B/E, or adopted during claim construction). Second, B/E relies on photographs that its expert, Dr. Chamitoff, produced after submission of his expert report, in the middle of his deposition, to support his newly-minted opinion that there is an 1/8 inch gap between the bottom of the “ribs” and the top of the support structure. As set out below, B/E’s argument relies on the unsupported limitation of “top of the support structure,” and ignores evidence such as B/E’s own documents and MAG’s expert testing that creates genuine issues of fact about whether there is load transfer at this “first” (lower) out-turned edge of the structures on the side of B/E’s toilet bowl.

1. The “Top of the Support Structure” Is Not Limited to the Highest Point of the Frame, at Its Highest Elevation.

B/E simply repeats the District Court’s unsupported conclusion that the first edge “would touch an intermediate point on the support structure,” as opposed to the very highest point of the support structure, and B/E even annotates a depiction of its support structure arbitrarily to delineate between an “intermediate part of frame” from the “top of frame.” Opp., 57. B/E is attempting to avoid infringement by limiting the “top of the support structure” to the very top planar surface of the tabs that are part of the horizontal frame member capping the side supports (the same tabs that interlock with the second (upper) edge, *see* Section IV.B, *supra*),

rather than the overall upper surface of the horizontal frame member itself. As MAG explained in its Opening Brief, the “top of the support structure” is not limited to the point of the side supports at the absolute highest elevation, but includes the entirety of the horizontal piece at the top of the “honeycomb” structure that makes up the bulk of the support structure:



A6076.



A6082. Opening Br., 55.

B/E does not and cannot cite to any part of the '942 Patent that restricts the location of the “top of the support structure” to a flat plane at the very highest point of the support structure, rather than the overall upper surface of the horizontal member at the top of the side support structures. In fact, the specification’s description of “top member” and the claim language “top of the support structure” (claim 13) and “top with an opening therethrough” (claim 1), explain that the “top of the support structure” is not limited to the tabs that extend from the surface of the top member of the frame, but includes the entire upper surface of that top member. A52, 4:40-42; A55,10:12-14; A56, 11:6-7.

MAG’s expert, Mr. Meyers, further identifies the portion of B/E’s toilet assembly that is “the top of the support structure.” He explained that the entire top portion of the side supports is reasonably understood as the “top of the support structure” because it is (a) located at the top of B/E’s vertical side supports and (b)

engages with the “first” edge, consistent with the ’942 Patent’s description of “top member” on which the claimed “flanges” rest. A6033-A6041; A6082.

For these reasons, the District Court’s requirement that the “top of the support structure” be limited to only points at the absolute highest elevation of the support structure does not justify summary judgment. There is at least a triable issue of material fact about whether the “first” edge contacts the “top of the support structure” of the B/E vacuum toilet.

2. B/E’s Pre-Litigation Documents and MAG’s Expert Analysis Create a Triable Issue of Material Fact about Whether the “First” (Lower) Edge Meets the Flange Limitation.

B/E attempts to avoid its own documents and the results of Finite Element Analyses (“FEA”) showing load transfer from the “first” edge to the support frame by pointing to a late-produced photograph that purportedly shows a 1/8-inch gap between the top member of the B/E support structure and the first (lower) edge. B/E contends that this gap, identified for the first time during the deposition of its expert Dr. Chamitoff, “is a fundamental attribute” of its toilet and that MAG has not identified any contradictory evidence regarding an “actual” B/E toilet. Opp., 53. This is far from correct.

MAG’s FEA testing of the B/E toilet shows that load is transferred from the “first” (lower) edge to the top of the support frame (as depicted in B/E’s CAD drawing), and thereby suggests that this alleged gap is immaterial to the presence

of load transfer at that spot. A6039-A6040. B/E makes much of the District Court's finding at summary judgment that the 500-pound load used in MAG's expert's FEA allegedly is more than the normal load, but fails to disclose that the FEA testing MAG used applies the same force of 500 pounds that is standard in the industry for simulating loads and [REDACTED]

[REDACTED] A3516-A3517; A5726-A5727; A6037-A6038. Likewise, B/E ignores the fact that the FEA testing showing load transfer from the "first" edge to the top of the support frame is based on a high-resolution laser scan using FEA-standard software of an actual B/E toilet that B/E produced at an expert inspection and simulating the same material properties. A5794; A6039-A6040. Thus, B/E's alleged "1/8 inch gap" cannot justify summary judgment.

Moreover, B/E documents that it created before litigation started show that B/E's alleged 1/8-inch gap between the top member of the B/E support structure and the first (lower) edge does *not* exist, and that there is contact between the "first" edge and the top of the support structure and loads are transferred at that point of contact. These documents include a CAD drawing of a B/E vacuum toilet that [REDACTED]

[REDACTED] and depicts contact (thus load transfer) between the "first" edge and the top of the support frame. A3187-A3188, ¶ 34; A3865; A3870; A6143.

B/E attempts to disregard the CAD drawing of a B/E toilet that B/E itself created and produced by arguing that it depicts a B/E toilet that was never manufactured. Opp., 54. This CAD drawing, however, clearly sets forth release dates and model numbers that demonstrate that this drawing depicts a B/E toilet that was both released and sold by B/E. Opening Br., 49; A3865; A3870. Furthermore, this CAD drawing shows that the first (lower) edge contacts the top of the support structure. *Id.* B/E does not dispute that the two surfaces are depicted as touching, but instead, and despite the unambiguous drawing release date, disputes that the toilet was ever produced, relying on the declaration of Mark Pondelick. Opp., 54; A3120-A3121, ¶ 34; A3159-A3160, ¶ 52. Mr. Pondelick's declaration, however, is not supported by any evidence and is insufficient to "explain away" the issues of fact created by the CAD drawing and other evidence. *See Ethicon*, 796 F.3d at 1325 (rejecting efforts by infringer's expert to explain away, without proof, documents showing infringement).

MAG's expert, Mr. Meyers, relied on his analysis of B/E's own CAD drawings and other B/E documents, in-person inspections of B/E's vacuum toilets, and twenty-plus years of experience in the aviation industry, to conclude that B/E's CAD drawing accurately represented an actual B/E toilet. A5974-A5976; A5979-A5984; A5991-A5993; A6143. This evidence and analysis create a genuine dispute of material fact that is not overcome by Mr. Pondelick's conclusory

declaration or Dr. Chamitoff's eleventh-hour "gap" theory. Because there are genuine issues of material fact about whether the "first" edge contacts and transfers load to the top of the support structure, summary judgment of noninfringement of the '942 Patent should be reversed.

MAG'S RESPONSE TO B/E'S CROSS-APPEAL

The undisputed facts regarding Mr. Pondelick's pivotal role in designing B/E's vacuum toilets and leading B/E's vacuum toilet business show that the District Court acted well within its discretion in applying this equitable doctrine of assignor estoppel to bar B/E's invalidity challenges. The District Court's ruling in this regard should thus be affirmed.

STATEMENT OF THE ISSUES

1. Whether the District Court abused its discretion in applying the doctrine of assignor estoppel to preclude B/E from challenging the validity of the patents-in-suit, in light of the undisputed fact that B/E used the knowledge and assistance of Mark Pondelick, a named inventor of the patents-in-suit and B/E's Vice-President and General Manager, to build B/E's vacuum toilet based on Mr. Pondelick's vacuum toilet designs.

SUMMARY OF ARGUMENT

The doctrine of assignor estoppel prevents the inequity of an inventor, and any entity in privity with the inventor, from later challenging the validity of the inventor's patent. The doctrine applies here, where B/E recruited a former MAG design engineer and inventor of the patents-in-suit, Mark Pondelick, who helped B/E build its nascent vacuum toilet business into a successful commercial venture "based on" Mr. Pondelick's patented toilet designs. Having done so, B/E cannot now challenge the validity of the very patents on which its business is based.

B/E relies on irrelevant facts to dispute the District Court's application of assignor estoppel. B/E contends that it tried to design around the patents-in-suit and that Mr. Pondelick's financial stake in the company is not as great as other cases in which assignor estoppel was applied. As the District Court correctly held, however, Mr. Pondelick was a critical hire for B/E who led B/E's vacuum toilet business, and as a result, B/E successfully entered a market in which it had no prior involvement. Based on these undisputed facts, the District Court was well within its discretion to apply assignor estoppel.

I. THE DISTRICT COURT CORRECTLY HELD THAT ASSIGNOR ESTOPPEL APPLIES

B/E has not shown that the District Court abused its discretion in granting MAG's motion for summary judgment as to assignor estoppel based on the undisputed facts in the record. B/E does not dispute that Mr. Pondelick played a pivotal part in designing, developing, manufacturing, marketing and selling its accused vacuum toilets—a role that is more than sufficient to demonstrate privity between Mr. Pondelick and to invoke assignor estoppel. Indeed, B/E admitted in sworn interrogatory responses that [REDACTED]

[REDACTED]

[REDACTED]

A1507-A1508. B/E further admitted that [REDACTED]

[REDACTED]

[REDACTED] A1522. These undisputed and clear admissions are more than enough to find privity.

B/E's attempts to minimize Mr. Pondelick's role do not undercut the propriety of the District Court's application of assignor estoppel. Opp., 64-66. Moreover, the District Court did not err in concluding that B/E's alleged "efforts to avoid infringement are not relevant to whether Mr. Pondelick and [B/E] are in

⁷ This B/E Aerospace statement referred to the "Rockford business" which is shorthand for B/E's vacuum toilet facility located in Rockford, Illinois. See, e.g., A1424; A1508; A1522.

privity.” Opp., 60 (quoting A9-A12). The District Court properly considered the *relevant* undisputed facts to conclude the Mr. Pondelick is in privity with B/E and that assignor estoppel bars B/E’s invalidity defenses.

A. The District Court Properly Considered Facts Relevant to Privity.

Assignor estoppel “precludes a patent assignor and those in privity with the assignor from contending that the patent is a nullity.” *See Shamrock Techs., Inc. v. Med. Sterilization, Inc.*, 903 F.2d 789, 793 (Fed. Cir. 1990). B/E does not and cannot dispute that Mark Pondelick, the inventor of the patents-in-suit, assigned the patents at issue to MAG. Accordingly, B/E focuses on arguing that there is no privity between Mr. Pondelick and B/E, such that Mr. Pondelick’s estoppel should not preclude B/E from challenging the validity of the patents-in-suit. B/E is incorrect.

First, B/E misstates the law of privity by suggesting that privity requires ““very close financial relationships in which the actual assignor almost envelopes the other entity.”” Opp., 62-63 (quoting *Earth Res. Corp. v. United States*, 44 Fed. Cl. 274, 286 (1999)). While such financial closeness can be sufficient to establish privity, it is by no means necessary to find privity. As the District Court noted, courts have found privity “where the assignor, albeit a mere consultant, supervised the Defendant’s allegedly infringing operations and where the defendant ‘needed’ the inventor’s expertise to conduct infringement.” A8 (quoting *BASF Corp. v.*

Aristo, Inc., 872 F. Supp. 2d 758, 775 (N.D. Ind. 2012)). Similarly, privity has been found “where the inventor was initially a part-time consultant who ‘participated in design discussions’ and later became Chief Architect of the defendant.” *Id.* (quoting *Brocade Commc’ns Sys., Inc. v. A10 Networks, Inc.*, No. 10-CV-03428-LHK, 2012 WL 2326064, at **5-6 (N.D. Cal. June 18, 2012)).

The District Court’s summary judgment order includes a detailed analysis of the facts potentially relevant to privity, using the illustrative factors outlined in *Shamrock*, 903 F.2d at 794, as its guide. A9-A12. The District Court’s conclusion was not, as B/E claims, “an unwarranted expansion of this Court’s precedent,” *Opp.*, 64, but rather, a careful and well-reasoned application of the law to the undisputed facts.

1. B/E Used Mr. Pondelick’s Knowledge and Assistance to Develop the Accused Toilets.

There is no genuine dispute that B/E used Mr. Pondelick’s “knowledge and assistance” to conduct the activities alleged to be infringing. A12. Mr. Pondelick was hired specifically to help develop the toilets that are accused of infringement. A9. Indeed, Mr. Pondelick was one of the first two people B/E hired to launch B/E’s new vacuum toilet business.⁸ As Director of Engineering for B/E Ecosystems during his time as a consultant, Mr. Pondelick led the design team that

⁸ A1316, 63:8-23; A1497-A1498 (B/E’s Response to MAG’s Interrogatory No. 13); A1427-A1428, 86:8-87:23 (Thao Hoang hired as first employee, after Mr. Pondelick, employed as consultant, made the introduction).

developed B/E's infringing toilets. A9 (quoting Mosley Decl. Ex. L, at 271). B/E itself made several admissions concerning Mr. Pondelick's critical role in developing B/E's vacuum toilet business. B/E admitted that [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED] *Id.*;

A1522. Mr. Pondelick now runs B/E's vacuum toilet division as Vice President and General Manager of B/E EcoSystems, the division in Rockford, Illinois, that designs and sells vacuum toilets. A8; A12.

These undisputed facts are more than sufficient to establish privity between Mr. Pondelick and B/E such that B/E is barred by assignor estoppel. Mr. Pondelick's role in developing B/E's allegedly infringing toilets and running its vacuum toilet division removes any dispute about whether B/E used his "knowledge and assistance" in developing the infringing products, as required for privity. *See Intel Corp. v. U.S. Int'l Trade Comm'n*, 946 F.2d 821, 839 (Fed. Cir. 1991).

2. B/E's Arguments Are Not Relevant to the Requirements for Establishing Privity.

In arguing against the District Court's conclusion that there is privity between Mr. Pondelick and B/E, B/E raises a host of irrelevant and misleading factual allegations. First, it is irrelevant whether Mr. Pondelick started as a consultant "*after* the decision to develop the accused toilet was made." Opp., 64 (emphasis in original)). Privity does not require that an inventor be an employee of the infringer, let alone that the inventor be hired before the decision to develop the infringing technology is made. *See* A8 (noting case law applying assignor estoppel where the assignor was a "mere consultant"). It is not disputed that Mr. Pondelick helped develop the infringing technology. Whether he participated in deciding that the technology *would* be developed has no bearing on his role in its actual development.

Likewise, it is irrelevant that others may have contributed to the allegedly infringing toilet's design, Opp., 64-65, or that B/E purportedly began development of the toilet before Mr. Pondelick joined the company, *id.* Privity does not require that an inventor work alone. Indeed, in *Shamrock*, the inventor oversaw work by others rather than performing it himself. *See* 903 F.2d at 794. Further, privity does not require that "the assignor be personally involved in designing the allegedly infringing aspect of [the] product." *Synopsys, Inc. v. Magma Design Automation, Inc.*, No. 04-CV-3923-MMC, 2005 WL 1562779, at *6 (N.D. Cal. July 1, 2005).

Instead, privity requires only that the inventor's "knowledge and assistance" be employed by the accused infringer, with respect to the accused products. *Intel*, 946 F.2d at 839. Even assuming that B/E's assertion that "Mr. Pondelick joined B/E after critical design decisions had been made" is true, Opp., 64-65, it does not detract from the key point that Mr. Pondelick was involved in the design and development of the accused product, as B/E has admitted.

Furthermore, privity does not require any particular corporate position, status, or financial stake. Thus, B/E's contention that Mr. Pondelick is not "akin to a company founder or significant stakeholder" is irrelevant. Opp., 65. Moreover, B/E's focus on Mr. Pondelick's "negligible financial interest in B/E" and his alleged lack of "outsize influence" is misleading. *Id.* at 65-66. The outstanding shares, revenue, and total number of employees that B/E cites in its brief relate to B/E's *overall aerospace business*, and thus, shed little light on Mr. Pondelick's critical role in B/E's *vacuum toilet business*. *Id.* As B/E admits, B/E was new to the vacuum toilet business when it recruited Mr. Pondelick. *Id.* at 64-65. B/E's "own documents indicate that Mr. Pondelick acted 'as the Director of Engineering' for B/E Ecosystems during his time as a consultant." A9. Mr. Pondelick rose rapidly within B/E's vacuum toilet business and is now its highest ranking executive, with authority to bind B/E to multi-million dollar contracts. *See* A9-A10. Despite B/E's efforts to minimize his role (and its repeated

mischaracterization of the legal requirements for finding privity, which does not require “outsized influence” or a large “financial interest”), the District Court correctly held that Mr. Pondelick’s compensation and leadership role support finding privity.

B. The District Court Properly Disregarded B/E’s Arguments Concerning Alleged Efforts to Avoid Infringement.

B/E’s contention that it used Mr. Pondelick’s assistance not to develop an infringing vacuum toilet, but rather, to develop a vacuum toilet that would avoid infringement of the patents-in-suit, is entirely misplaced. As the District Court noted, this Court “has made clear that ‘an illicit purpose is not necessary to conclude that there was privity.’” A9 (quoting *Intel*, 946 F.2d at 839). B/E cites no case law to the contrary, nor case law to support the contention that alleged efforts to avoid infringement should somehow be factored into the assignor estoppel analysis. Indeed, B/E’s argument amounts to an admission that it used Mr. Pondelick’s knowledge and assistance to develop the toilets that are accused of infringement. This admission alone supports application of assignor estoppel.

Importantly, assignor estoppel is directed toward *invalidity*, not infringement. *Shamrock*, 903 F.2d at 793 (holding that assignor estoppel “precludes a patent assignor and those in privity with the assignor from contending that the patent is a nullity”). The key question is whether there is a “relationship

between the inventor and [the infringer] in light of the act of infringement.” *Id.* Efforts to avoid infringement are thus immaterial.

Further, *intent* to infringe has no bearing on infringement itself. *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1922 (2015) (holding that direct patent infringement is “a strict-liability offense in which a defendant’s mental state is irrelevant”). B/E nonetheless repeatedly states that Mr. Pondelick worked with B/E and its outside counsel to avoid infringement. Opp., 65. These assertions do not undercut the District Court’s finding of privity, but only confirm that Mr. Pondelick was a key player in developing B/E’s accused technology and that assignor estoppel should apply, regardless of any intent to avoid infringement.

Further, B/E is incorrect that “[t]he district court’s holding is prejudicial to inventors and market competitors who engage in design-around efforts and attempt to improve the technology beyond what has been patented, stifling innovation and competition.” Opp., 68. If anything, the District Court’s holding will encourage innovation and competition by discouraging lazy design-around efforts and motivating inventors to find true alternative designs, knowing that they cannot challenge the validity of their own patents.

C. The Balance of Equities Favors Assignor Estoppel.

B/E’s arguments concerning the balance of equities are misplaced, and like its other arguments against assignor estoppel, rely on irrelevant facts and

mischaracterizations that have no bearing on the District Court's sound exercise of its discretion. Moreover, the "equities" on which B/E focuses are not the "equities" relevant to assignor estoppel, which focus on preventing an inventor from assigning a patent value, and then turning around and saying that it is without value. *Diamond Sci. Co. v. Ambico, Inc.*, 848 F.2d 1220, 1225 (Fed. Cir. 1988). The "balance of equities" relevant to assignor estoppel and related privity issues is specific to the context in which assignor estoppel applies, and here relate to: (a) Mr. Pondelick's promise that his patents are valid and his assignment of them for value, and (b) B/E's use of Mr. Pondelick's knowledge and assistance to conduct alleged infringement. *Id.* at 1224-25.

First, B/E suggests that MAG somehow treated Mr. Pondelick poorly and left him no choice but to work for B/E. B/E's inflammatory accusation that MAG "decided to shut down operations, leaving Mr. Pondelick and several of his colleagues unemployed," Opp., 69, is unsupported, irrelevant, and incorrect. As an initial matter, MAG closed its Rockford facility in 2009, years *after* Mr. Pondelick stopped working for MAG. A8147, 105:8-14. At that time, several of MAG's Rockford employees were offered positions elsewhere in MAG's operations. A8146, 61:5-17.

Mr. Pondelick's departure from MAG thus had nothing to do with the closure of MAG's Rockford facility. In fact, Mr. Pondelick explicitly and

emphatically denied that his decision to leave MAG had “anything to do with the decision by MAG [REDACTED]” A8150, 49:21-24. Rather, Mr. Pondelick left MAG *voluntarily* in 2006 because he “had another opportunity.” A8149-A8150, 48:10-13, 49:2-4. Specifically, Mr. Pondelick [REDACTED] A8149, 48:14-19. After Mr. Pondelick left MAG, he worked as a consultant for MAG and, later, for B/E. A8151, 50:8-10; A1320-A1321, 73:4-74:8. After B/E hired Mr. Pondelick as a consultant in 2008, B/E [REDACTED] [REDACTED] A1320-A1321, 73:4-74:8; A1498.

Mr. Pondelick’s designs for B/E’s vacuum toilet were so essential to B/E’s new vacuum toilet division that B/E decided it wanted all of his time, and sought to hire him as an employee, rather than a consultant. In so doing, B/E [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

A1522.

In sum, Mr. Pondelick voluntarily terminated his employment at MAG in order to pursue more lucrative opportunities for his own personal benefit. His decision paid off in the form of significant payments from B/E and a high-ranking position within B/E's vacuum toilet division, all built on the technology that Mr. Pondelick originally developed and patented for MAG.

Accordingly, B/E's suggestion that Mr. Pondelick had few employment options because MAG allegedly "shuttered Envirovac [MAG's Rockford facility] and the relevant technology" is entirely false. Opp., 69. Mr. Pondelick decided on his own to leave MAG, regardless of the fate of MAG's Rockford facility and its technology.

B/E then suggests that its unproven and unsupported allegations about "MAG's unclean hands" should preclude application of assignor estoppel. Opp., 69. As an initial matter, MAG disputes B/E's baseless allegations that MAG pursued a strategy based on "deliberate misappropriation of B/E's confidential information and MAG's intentional misuse of that misappropriated information to

disparage the B/E vacuum toilet to customers.” *Id.* B/E’s only support for this assertion—which never formed the basis for any counterclaim it sought to assert below—is a citation to four pages of baseless and irrelevant assertions from the summary judgment proceedings. *Id.* (citing A2971-74). B/E never proved that MAG did anything improper with B/E’s allegedly confidential information, nor that MAG’s conduct has ever been anything other than genuine competition against a rival that built its vacuum toilet business based on MAG’s patented technology. Most importantly, these allegations are irrelevant to the question of whether assignor estoppel applies based on the behavior of B/E and the inventor and leader of B/E’s vacuum toilet business, Mr. Pondelick.

Further, even if B/E’s allegations were true (which they are not), the District Court properly disregarded them. B/E’s allegations are entirely unrelated to the equities that determine assignor estoppel because they have nothing to do with the patents-in-suit or the relationship between Mr. Pondelick and B/E. *See, e.g., Mag Instrument, Inc. v. JS Prods., Inc.*, 595 F. Supp. 2d 1102, 1110 (C.D. Cal. 2008) (“The doctrine of unclean hands bars a plaintiff from seeking equitable relief ‘only where some unconscionable act of [the plaintiff] has immediate and necessary relation to the equity that he seeks in respect of the matter in litigation.’”) (alteration in original); *see also Diamond Sci.*, 848 F.2d at 1225. B/E cites no case that precludes assignor estoppel due to tangential allegations entirely unrelated to

the patents-in-suit. Thus, B/E's unproven allegations are irrelevant to the application of assignor estoppel.

Finally, B/E's public interest arguments lack merit. As discussed above, B/E is incorrect that the application of assignor estoppel stifles innovation. Opp., 70. Assignor estoppel does not prevent companies from hiring "talented inventors." Assignor estoppel merely prevents companies from hiring inventors, using their specialized knowledge to create infringing products, and then defending themselves by challenging the validity of those same inventors' patents. And, as mentioned above, a robust assignor estoppel doctrine actually encourages design-around efforts. An inventor who has assigned a patent for value and knows that he or she will be unable to challenge its validity will be strongly motivated to design a truly non-infringing alternative.

Likewise, B/E's cry to "the important public interest in allowing challenges to patent validity" is misplaced. Opp., 70. The doctrine of assignor estoppel already strikes the balance between the public interest in allowing patents to be challenged, on one hand, and the public's interest in holding an inventor to his oath and an assignor to his promise of value in exchange for value received, on the other. As the Court held in *Diamond*, the doctrine of assignor estoppel is justified in part by the desire "to prevent unfairness and injustice" and "to prevent one from benefitting from his own wrong." *Diamond Sci.*, 848 F.2d at 1224 (internal

quotation marks omitted). This Court has explicitly recognized that when present, equities underlying assignor estoppel outweigh “the general public policy disfavoring the repression of competition by the enforcement” of invalid patents. *Id.* at 1225.

In sum, the District Court’s application of assignor estoppel was not an abuse of discretion because the undisputed facts establish beyond any genuine dispute that: (a) Mr. Pondelick is estopped, and (b) B/E is in privity with Mr. Pondelick. The District Court’s summary judgment as to assignor estoppel thus should be affirmed.

CONCLUSION AND STATEMENT OF RELIEF SOUGHT

For the reasons discussed above, MAG respectfully requests that this Court reverse the District Court's grant of summary judgment of noninfringement of the patents-in-suit. With regard to B/E's cross-appeal, MAG respectfully requests that this Court affirm the District Court's grant of summary judgment on assignor estopped.

/s/ Steven D. Moore

Steven D. Moore

**KILPATRICK TOWNSEND &
STOCKTON LLP**

Two Embarcadero Center, 8th Floor

San Francisco, CA 94111

Telephone: (415) 576-0200

Facsimile: (415) 576-0300

smoore@kilpatricktownsend.com

Adam H. Charnes

**KILPATRICK TOWNSEND &
STOCKTON LLP**

1001 West Fourth Street

Winston-Salem, NC 27101

Telephone: (336) 607-7300

Facsimile: (336) 607-7500

acharnes@kilpatricktownsend.com

*Attorneys for Plaintiff-Appellant
MAG Aerospace Industries, LLC*

CERTIFICATE OF SERVICE

I certify that on September 23, 2015, a true and correct copy of the foregoing document was served by the Court's CM/ECF System or via electronic mail as follows:

Andrei Iancu(AIancu@irell.com)
Richard M. Birnholz (rbirnholz@irell.com)
Morgan Chu (mchu@irell.com)
Benjamin Haber (bhaber@irell.com)
Harry Mittleman (hmittleman@irell.com)
Melissa Sedrish Rabbani (mrabbani@irell.com)

IRELL & MANELLA LLP

1800 Avenue of the Stars, Suite 900
Los Angeles, CA 90067

Counsel for Defendant-Cross-Appellant
B/E Aerospace, Inc.

By: /s/ Steven D. Moore
Steven D. Moore
**KILPATRICK TOWNSEND &
STOCKTON LLP**
Two Embarcadero Center, 8th Floor
San Francisco, CA 94111
smoore@kilpatricktownsend.com

CERTIFICATE OF COMPLIANCE

Pursuant to Fed. R. App. P. 32(a)(7)(C), the undersigned certifies that this brief complies with the type-volume limitations of Fed R. App. P. 32(a)(7)(B). Exclusive of the portion exempted by Fed. R. App. P. 32(a)(7)(B)(iii) and Fed. Cir. R. 32(b), this brief contains 12,435 words as counted by the word-processing system used to prepare the brief.

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By: /s/ Steven D. Moore

Steven D. Moore

*Counsel for Plaintiff-Appellant
MAG Aerospace Industries, LLC*